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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,714	08/06/2001	Yasuharu Yoshida	Q65726	8770

7590 01/14/2008  
SUGHRUE, MION, ZINN, MACPEAK & SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

EXAMINER

GENACK, MATTHEW W

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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01/14/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

***Response to Appellant's Arguments***

1. Appellant's arguments filed 27 September 2007 have been fully considered but they are not persuasive.

Appellant asserts, on Page 4, that "these additional scenarios discussed by the Examiner [regarding the possibility of a plurality of classes of drivers using the tollgate system] are not found in either Ando or Wiatrowski." On the contrary, vehicles in separate traffic lanes communicate with separate antenna units (Column 4 Lines 27-36, Fig. 1).

Appellant asserts, on Page 4, the "the reference to "the circuit" [Column 2 Lines 48-57] refers not only to the comparators, but also to the semiconductor integrated circuit as a whole and thus to the circuit as a whole, because presumably any additional circuit components, comparators or otherwise, would increase the complexity and size of the circuit and thus prevent it from being mountable as required by Ando." First, the paragraph in question discusses the problem of fitting two comparators into an integrated circuit that is suitably sized for mounting. Second, modifying the RSE of Ando so that a plurality of frequencies are used for transmissions from the plurality of OBEs to the RSE need not require an integrated circuit that is of a size not suitable for mounting because Ando only states that the circuit must be "more simplified and reduced in size for mounting" but does not provide a frame of reference for this statement, nor any range of acceptable quantities, nor any indication that the requirements for mounting the integrated circuit preclude the possibility of frequency switching. The only figure referred to in this context is Figure 16, which is labeled "Related Art."

Appellant asserts, on Page 5, that “This disclosure of Ando merely indicates that the down-link and up-link cannot be on the same channel.” On the contrary, the “MDS [Message Data Slot] is multiplexed using transmission channels, each of which uses a different frequency for the down-link and for the up-link. [emphasis added]” (Column 8 Lines 40-42) whereby the MDS is one of three slots of a frame (Column 8 Lines 17-18, Fig. 8). This clearly indicates that there are a plurality of channels, each channel having a respective uplink frequency and downlink frequency, thereby indicating a plurality of uplink frequencies and a plurality of downlink frequencies.

Appellant asserts, on Page 5, that “this [Examiner’s statement that engineering solutions often involve trade-offs] is precisely Appellant’s point in arguing that Ando and Wiatrowski are impermissibly combined. Upon viewing the disclosures of Ando and Wiatrowski in their entirety, one having ordinary skill in the art would reject the combination because such a combination would add additional complexity to the system of Ando and would require additional components in the system of Ando...” Examiner points out that complexity is but one factor in engineering design, and that Examiner’s statement in the Examiner’s Answer (that engineering solutions often involve trade-offs), referred to the possibility that it may be acceptable engineering practice to increase complexity if some other factor(s) is/are improved. Appellant equates “engineering solutions often involve trade-offs” with the notion that complexity must be reduced in this particular instance, when this is the exact opposite of the point that was made in the Examiner’s Answer.

Regarding Appellant’s argument that Ando teaches away from the frequency switching concept of Wiatrowski *et. al.*, there is no explicit statement in Ando that frequency switching

may not be used with the invention, and there is also indication that multiples frequencies are used, as outlined in the preceding paragraphs.

Appellant asserts, on Page 7, that “the squelch rules are inapposite of the claimed high speed link establishment and non high-speed link establishment.” On the contrary, squelch merely refers to the practice whereby a signal is either passed or blocked according to some criteria (typically signal strength) at the receiving end. The presence of squelch criteria for both high speed and low speed binary signals indicates that both high speed and low speed links are established in the invention of Wiatrowski *et. al.*

Appellant asserts, on Page 7, that “Wiatrowski uses different demodulation types and squelch rules to distinguish the channels *in the case where the channels use the same frequency*. Thus, Appellant asserts that Wiatrowski does not teach the feature of claim 4 of switching demodulation methods when switching radio frequencies.” On the contrary, when switching from Channel 2 (a priority channel) to Channel 4 (a non-priority channel), as per Fig. 2B, the demodulation type is changed from digital to analog, as per the table in Column 9, whereby the non-priority channel has a first frequency and the priority channel has a second frequency (Abstract). Receiving frequency A and transmitting frequency B for Channels 1-16 is merely illustrative. Indeed, there is no indication that the use of “A” and “B” is for any purpose other than clarifying that the transmitting frequency and the receiving frequency are different for each channel.

### ***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Genack whose telephone number is 571-272-7541. The examiner can normally be reached on Flex.

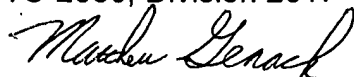
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Matthew Genack

Examiner

TC-2600, Division 2617



18 December 2007



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